23947/P 47426

GENERAL OBSERVATIONS

ON THE

LATE EPIDEMIC MEASLES,

IN

EDINBURGH.

EDINBURGH:

PRINTED BY WILLIAM BLACKWOOD.

1808.

MEASLES. A contagious synocha, with sneazing, epiphora, and dry hoarse cough. On the fourth day, or a little latter, break forth small, clustered, and scarce elevated papulae; after three days going off in very small branny scales.

CULLEN'S NOSOLOGY.

GENERAL OBSERVATIONS

ON THE

MEASLES.

THE MEASLES, it is but too well known, were very fatal during the late winter and spring, in this city and its suburbs; many families having lost a number, and not a few been deprived of all their offspring. That the measles have not generally been reckoned a dangerous disease, renders the above circumstance of more than ordinary consequence. Sydenham says, "That if this disease is properly "treated, it is not at all dangerous;" and I have heard it remarked by Dr. Gregory, (when speaking of the measles) that "he never knew a patient die till two or three weeks after that disease."

I am not anxious to inquire after greater authority than that of these two great Physicians, nor do I mean, from experience, to call in question the accuracy of their observations, as to what may generally have been the case with regard to the degree of danger with which this disease is accompa-

nied; yet I must beg leave to observe, that during the late epidemic, it fell to my lot to see several children cut off so early as between the third and fourteenth day of the disease, and that, in some cases, in defiance of every means that could warrantably be employed to prevent and relieve urgent symptoms.

The uncommon mortality alone, with which this epidemic was accompanied, carries with it sufficient importance to merit the attention and consideration of every one interested in the welfare of his fellow creatures. But this is not the only circumstance which is calculated to arrest our attention in the present instance: The innate, or perhaps in some degree acquired propensity in the human mind, to account for almost every thing which presents itself to our consideration, however far removed above the limited comprehension with which we are endowed, has in this, as in many other instances, grievously erred; with the risk, as usual, of bringing after it a train of very dangerous consequences. This remark will readily be allowed when it is understood, that the late virulence and fatality of the measles has by many been ascribed to the recent practice of inoculation for the *cow pox*.

It is believed, by such as are ignorant of the animal economy, that the *cow pox* has prevented the exit of some noxious humour, which is supposed to be lurking in the constitution, and which was wont to be thrown out by the *small pox*, and conclude, as a natural consequence, that this supposed noxi-

ous humour, remaining in the constitution, was the cause of the uncommon virulence of the late epidemic Measles.

It is certainly by no means sufficient that Medical Practitioners are aware of the fallacy of this notion, when its consequences are duly considered; for should such a prejudice gain ground, it would prove none of the smallest obstacles to the removal of the too general want of confidence in that inestimable discovery, the Vaccine Inoculation.

But if several of the worst cases which occurred in the late measles can be shown to have taken place in patients who had formerly undergone the Small pox, there are surely few who would not receive it as a full confutation of the above-mentioned erroneous theory; and though I cannot fairly do so from my own experience, yet that it readily can be done, there need be no manner of doubt whatever. In some instances, however, the prejudice has been so strong, that parents, who had lost several of their children by the measles, have strongly and frequently urged the inoculation of their other children with the *small pox*, with the view of thereby rendering the *measles* less dangerous in their effects. It is almost unnecessary to say, that, for very obvious reasons, their request was not complied with. This non-compliance, however, it may be useful to remark, has more lately been understood as not being altogether left as a matter of discretion—a process being lately filed in a town in England against the inoculator, or persons requiring inoculation for the

Small pox, on the ground of introducing a *nuisance* into the neighbourhood. So much importance indeed has this subject more lately acquired, that a bill has been laid before Parliament, in order that in future it may be regulated by authority. How far this may be good policy at the present moment, I do not presume to decide, though every Scotchman at least, claims the liberty of judging and deciding for himself.

But after what has been said, it may be expected that some reason should be assigned as the most probable cause of the uncommon severity of the symptoms, and frequent fatality, with which the Measles have this season been accompanied.—Averse, as every honest man should be, from raising a theory out of a comparatively limited number of facts or observations, it may be allowable, in the present instance, to state the few following remarks.

It is now well known, that the Atmosphere has a very particular effect in variously modifying the different functions of the animal economy, according to the different changes to which it is subject. Its more obvious qualities, viz. cold, heat, moisture, and dryness, may be combined in a thousand different proportions at different periods, and that too in very rapid succession; yet these are by no means the *only*, if the principal variations of the atmosphere which particularly affect the human constitution. The atmosphere is a compound body: its constituent parts are known to be two in number, which are also present in very different proportions at differ-

ent periods. Its adventitious parts are much more numerous, depending on local situation, season of the year, &c. and admit of a greater variety in their proportionate quantities and combinations; they are probably those parts, too, of the atmosphere, which are more immediately concerned in the production of many of those diseases to which the human body is subject.

It is sufficient, however, for the present purpose, to observe, that the late Winter season was what is commonly called *very severe;* the Spring no less so, there being a long continuance of cold, damp weather, frequently and suddenly alternating. Now, it is well known, that such a state of the atmosphere has a strong tendency to produce and renew morbid affections in the contents of the *Thorax* and *Abdomen*, in *particular*, and in *general* to induce a *relaxed* state of the *whole system;* it is also well known, that it is the natural tendency of the measles to produce morbid affections in the same *particular parts*, but in *general* to produce an *inflammatory* state of the *whole system*. Two so very different causes, acting at the same time upon the *same particular parts*,—each having a tendency to induce a *general* state of the system, directly opposite to that of the other, must naturally lead us to expect a very striking and complicated action And that such has been the nature and cause of the late uncommon virulence of the measles, I think there can be but little reason to doubt; for it must also be observed, that the Measles were always most severe in families having their houses situate

in low-lying, damp, and bad-aired places of the town, which would evidently give additional vigour to the causes already mentioned. But there is still another circumstance which must not be neglected or overlooked: At the time the *Measles* were so prevalent in this city, the *Scarlet fever* also made its appearance, in one of its less malignant varieties. Is it not possible, or rather probable, that when two diseases, having a considerable affinity to each other, prevail at the same time, that the one may have the power of modifying the symptoms of the other, without any directly evident combination of the two diseases taking place? Sydenham seems frequently to take for granted some such modification of diseases.

That the *Scarlet fever* was, in some instances at least, *mistaken* for the *Measles*, seems more than probable. In some parts of the country, the former disease was reported to be very malignant, while, in other parts, the latter was said to be more epidemic and fatal than even in this city. Whole families were said to be seized with the *measles*, from the infant to the oldest person in the house, and proving equally fatal to both. But if we consider the great similarity which these two diseases have to each other, and at the same time the great improbability, that so many old people, said to be seized with the Measles, should not formerly have undergone that disease, we are naturally led to conclude that there must have been a *mistaking* of the one disease for the other. Indeed, I am much deceived, if there were not instances of

such a mistake even in this city. This, however, is certain, that there were instances of patients being supposed to have had *two eruptions* of the *measles*, succeeding each other after an interval of some days. This circumstance had long ago been remarked in this place, and was recorded in the Ed. Med. Essays; and is quoted, by Dr. Willan, in a note in his Observations on Cutaneous Diseases, as follows:

"I never observed what is remarked Ed. Med. Essays, v. 28." 'that in some instances, after the 'patient had remained listless for several days or 'weeks, the eruption came out again.'

"This occurs, however, in Scarlatina."

Sydenham, though comparatively unacquainted with Scarlatina, was abundantly so with the Measles; yet he takes no notice of such an occurrence as a *second eruption* of the *measles*, which, if it had occurred, could not have missed his accurate observation. I do not recollect of hearing Dr. Gregory mention his ever having observed such an occurrence.

The following case, out of others, may perhaps throw some light upon the subject:

A child, about fifteen months old, was seized with the measles, but from being too long neglected, proved fatal, from an effusion taking place into the cavities of the *pleura*. Two days after, the next oldest child, about three years of age, was attacked with fever, and, after the usual time, had a complete eruption of the measles, with their other concomitant symptoms. On the eight day the erup-

tion had disappeared on the face and breast, but could still be discovered on the other parts of the body. In the evening, the child became more peevish than usual, had a restless night, and next morning the face, but particularly the neck, breast, and arms, were completely covered with a fresh eruption, at first sight very much resembling the former, but, on more close examination, evidently somewhat different. It was not raised above the skin, and was of a different shade of colour from the measles, and, on examining the throat, the nature of the complaint was no longer to be concealed: The colour and general appearance of the *fauces* was quite changed from what it was two days before, and a number of ulcers had made their appearance, covered with white sloughs. With a good deal of care the child recovered slowly, and, what seemed very curious, the faded eruption of the measles could be discovered on the body of the child, particularly on its legs, even after the scarlet eruption had disappeared. Nothing could be more complete than the disquamation which this child underwent, after both the eruptions had terminated.

About six days after this child had been seized with the *second eruption*, two of her older sisters were seized with the *malignant sore throat*, without any eruption that could be discovered. They were ordered to take as much good sweet yeast, (of which even infants are very fond while under this disease) as they chose, at least one tea spoonful in

the hour, and to eat plentifully of sweet oranges, by which means they soon recovered.

As there was no case of Scarlet fever, or *malignant sore throat*, (which is now generally allowed to be the same disease) in the neighbourhood, it appeared to be of some importance to discover from whence the contagion had originated; and, on particular inquiry, it was found, that a female friend of the family had come from a part of the country where the *Scarlet fever* was very prevalent and malignant, to see the child which was first seized with the measles, and which died about two days after her arrival. This person was at the time a convalescent from the *Scarlet fever*, by which disease, if I rightly recollect, she had lately *lost* her husband.

At the same time with the *Measles* and *Scarlet fever*, the *Hooping Cough* was likewise very common: that a combination of the former with the latter of these diseases, should place the patient in a very perilous situation, is not, *a priori*, to be wondered at, and that death was, in some instances, the effect of such a combination, we know from experience.

Yet this was neither uniformly nor necessarily the consequence, as the following case, out of others, will more than sufficiently prove:

A child, when only about eight days old, was seized with the Hooping Cough, and had pretty frequent and severe fits of coughing. The house in which it lived, was situate in as unhealthy a situation as can be found in this city: The Measles

were very frequent in the neighbourhood, and proved fatal in many instances; yet this child, when only four weeks old, labouring under the Hooping Cough, was seized with the Measles, and recovered without any particularly bad symptom making its appearance.

It is now to be hoped, that if the foregoing general observations be considered, and carefully extended, there will be no necessity for inquiring after any other cause for the severity of the symptoms with which the late epidemic Measles were accompanied; for although there may, and probably do exist, a certain fixed revolution of diseases, yet we are not sufficiently acquainted with this revolution: And granting we were, the effects produced must still be referred to some such natural causes as we have been considering.

Sydenham gives a short account of a species of the Measles that made its appearance in London in the year 1674, which seems, almost in every respect, to have been of the same nature with that which lately made its appearance in this city. Among other circumstances, he remarks, that they were "not so regular, nor so constantly kept their "train of symptoms, for sometimes the eruption "came out earlier, and sometimes later; whereas, "in the other kind, they always appeared on the "fourth day inclusive, from the beginning of the ill-"ness." Again, "I rarely found that the skin "peeled off like branny scales upon the disappear-"ance of the eruptions:" and again, "it proved

" more destructive, when unskilfully treated."—What he adds is also worthy of attention:

" During the first two months in which this " species of the Measles prevailed, a kind of *mor-* " *billous fever* attacked a few subjects, attended " with some eruptions on the body, especially the " neck and shoulders, *resembling the measles*, from " which they only differed in being confined to the " parts above mentioned, and not seizing the whole " body. The fever also, though apparently of the " same kind, was more violent, and lasted fourteen " days, and sometimes longer. It admitted neither " *bleeding* nor glysters, being exasperated by " both."

The symptoms which accompanied the late epidemic Measles in this city, were very irregular. In some cases the patient was suddenly attacked with high fever, with all its usual symptoms of heat, thirst, oppression, restlessness, head-ach, flushing of the face, &c. the *catarrhal affection* not making its appearance for some time after; yet on examining the *fauces*, they generally appeared more swelled and redder than usual, and sometimes the blood vessels appeared enlarged, as in *ophthalmia*. This manner of attack was most common in stout, full-fed children, after some imprudent exposure to cold, the contagion of measles having been previously received into the constitution. Others, after having been unusually peevish and indisposed for days, and sometimes weeks, were suddenly attacked with laborious breathing;

while others, after being in the same languid state, were attacked with violent purging, which prevented or retarded the eruption. Such as were seized in this manner, were generally of a scrophulous disposition. Some were attacked with general indisposition, sinking of the countenance, coldness of the extremities, frequent *tenesmus*, passing a small quantity of black-coloured matter, sometimes watery, and tinged with blood; the skin remarkably dry, generally cool, but at intervals, and for a short time, very hot, during which time the cheeks were alternately flushed, the pulse being uniformly small and frequent. When such had been neglected, they sunk into a comatose state, and died, without any eruption making its appearance. Those that were attacked in this last manner, were generally, but not always, children of a very delicate constitution, or such as had been previously much reduced by some other disease.

The period at which the eruption made its appearance was extremely irregular, and generally much later than usual. In one instance the eruption never made its appearance, excepting a slight tinge of redness on the middle of the breast, and that only to be seen in a particular shade of light; yet a complete disquamation of the whole cuticle followed, and the child, with a great deal of care, was preserved.

The method of cure which appeared most successful, was upon the whole very simple. It appeared necessary to restrict the patient's diet entirely to gruel, toast and water, and such like, du-

ring the whole course of the disease, excepting those patients who were attacked with the disease in the manner which was last taken notice of, in which cases a fuller diet, and even cordials, were frequently necessary : The state of the skin, stomach, and intestines, being carefully attended to, and their functions kept natural, as far as possible. When any topical affection of the lungs or bowels was threatened, repeated Blistering seemed to succeed better than Bleeding.

There is a cough which always attends the Measles, but this cough is different from that which attends an Inflammation of the lungs; and can generally, by attention, be easily distinguished from it. To mark this difference seemed to be of the utmost consequence ; for if a Blister was applied the moment the cough changed into that which indicates an inflammatory affection of the lungs, and repeated according to circumstances, there was almost a certainty of success ; but if this was neglected, the contrary result was almost as certain. In several instances in which Bleeding, both topical and general, was employed, the patients seemed relieved, but not long after they sunk, from an effusion taking place into the cavities of the *pleura*. That Bleeding is generally an essential remedy in Measles is most certain, yet in this epidemic, experience did not appear to be in its favour ; for the diarrhoea, whether it accompanied or succeeded the measles, was best removed by a gentle laxative, with a blister to the small of the back or abdomen, and occasional opiates :

Opiates were indeed useful, when properly administered, during the whole period of the disease, the inflammatory stage not excepted.

The following outline of a few cases may perhaps be interesting, as being less common:

1. A child, about two years of age, was seized with the Measles, accompanied with frequent *tenesmus*. The eruption did not appear till the sixth day, and early on the eighth day the child died without any very evident cause. Afterwards it was discovered that a mortification had taken taken place in the *rectum*.

2. A stout boy, of about eight years of age, was attacked with the Measles, accompanied with a violent inflammation of the throat, which spread to the *trachea*, producing a violent croup, which baffled every means that could be thought of, and proved fatal.

3. A child, about two years of age, labouring under the Hooping cough, was attacked with the Measles, and by repeated blistering, an inflammation of the lungs was prevented; she, however, began to pass a considerable quantity of purulent-looking matter, by stool, which she continued to do, gradually wasting, for two weeks, and died. On examining the contents of the abdomen, all the viscera were sound, excepting the *sigmoid flexure* of the *colon* and the *rectum*, which were much thickened in their coats, and poured out pus

from their whole internal surface, which was rough and inflamed.

4. A boy, about four years of age, of a very scrophulous family, was attacked with the Measles, and, in opposition to every means to prevent it, was succeeded by *Tabes Mysenterica*, under which he lingered for two months, and died. On examining the body, the cavity of the abdomen was found completely obliterated, the whole viscera being consolidated into one mass, a transverse section of which having an appearance, most like of any thing, to that of a bullock's liver—the large blood-vessels of the latter representing the cavity of the intestines; yet this boy had to the last a craving appetite, and a regular passage through his bowels.

5. A child, about two years of age, was affected with the Itch, and was at the same time attacked with the measles, which proved a very distressing combination; for the little patient was kept in perpetual agony by the excessive itching, which she tried to alleviate by moistening the parts affected with her saliva. About the second day of the eruption of the measles, the itchy pustules on the wrists and hands became more inflamed, and went on to suppuration, having so completely the appearance of small-pox, might readily at first sight have deceived any one.

The following curious circumstance may perhaps not improperly be introduced here:

A boy at school, who was affected with the *Itch*, took the strange whim of *inoculating* his school-

fellows, and a number thoughtlessly submitted to the operation, which he performed by making a scratch with a pin, and then introducing the *matter* into the wound, which he took from the *Itchy pustules* on his own hands. The consequence of this was, that, after a few days, a number of the boys on whom this operation had been performed, were attacked with *fever*, which was followed by an *eruption* over the body, so completely resembling the *Small pox*, as to be at first sight mistaken for that disease.

This circumstance may at least serve to enforce the caution of paying very particular attention to the state of the subject from whom *vaccine matter* is intended to be taken; for there is a *still more disagreeable disease* than the *Itch*, which may be communicated by *innoculation*.

6. A boy, about four years of age, was attacked with the Measles. On the evening of the second day of the eruption, he became extremely restless, and at times evidently delirious, the other animal functions remaining natural. During the night, he frequently started up, crying that something was violently pricking some parts of his skin, at one time that of his head, next moment that of his foot, and in a second it was that of his shoulder, and so on. Nothing particular could be discovered on the parts he complained of, yet he at times rubbed the parts affected so violently, as to produce an elevation of the cuticle. Next morning, however, it was discovered that another eruption had made its appearance, occupying the interstices

of the measles, and completely covering every part of the *cutis* not previously occupied by that disease. The *papulae* of the measles now appeared uncommonly raised above the skin, so as to feel quite rough when the hand was drawn over them. The face and under extremities, in particular, were much swelled, and on the latter there were a number of tortuous and irregularly defined stripes, of a bright blue colour.

The new eruption, which made its appearance during the measles, gradually subsided, and was removed three days after its first appearance; the eruption of the Measles still continuing, and did not begin to fade till two days after the former eruption had disappeared.

This boy recovered, but continued for some time remarkably weak. He is now in good health and spirits.

7. A child, about eighteen months old, said to have just recovered from the Measles, had the whole internal parts of her mouth covered with an intolerably foetid ulcer, the gums appearing as if rotted off, leaving the sockets of the teeth quite exposed. A strong decoction of bark, with sulphate of zinc, was frequently injected by means of a syringe, and also the juice of oranges by itself; by which means, (the diet being also regulated) the appearance of the mouth soon changed for the better, the ulcers healed, and the gums were renewed, so as to cover the sockets of the teeth as formerly. There were several instances of such an occurrence this season, succeeding an eruptive disease said to be the Measles.

IF the Writer of the foregoing observations, by publishing them, will have contributed any thing, however little, to the good of his fellow-creatures, he will be more than satisfied for any little trouble it may have cost him. He might have been much more minute, and extended his remarks to a much greater length. This, however, would have been deviating from the plan he had laid down, which was to state a few general observations, which had occurred to him in the course of his own practice, hoping that some other person, of more extensive experience and information, might be induced to give a more circumstantial account of the history and Method of Cure of an Epidemic, which, from the mortality with which it was accompanied, is rendered in no small degree interesting to mankind.

CIVIS MEDICUS.